

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/047396 A1

- (51) International Patent Classification⁷: C08L 101/00, C09D 201/00 // C08G 83/00
- (21) International Application Number: PCT/SE2004/001602
- (22) International Filing Date: 4 November 2004 (04.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0302976-6 12 November 2003 (12.11.2003) SE
- (71) Applicant (for all designated States except US): PERSTORP SPECIALTY CHEMICALS AB [SE/SE]; S-284 80 Perstorp (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JAMES, David [FR/SE]; Nedre Holländaregatan 4, S-252 25 Helsingborg (SE). HÄGGMAN, Bo [SE/SE]; G W Palms väg 5, S-224 65 Lund (SE).
- (74) Agent: STENBERG, Yngve; c/o Perstorp AB, S-284 80 Perstorp (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/047396 A1

(54) Title: RADIATION CURABLE WATERBORNE COMPOSITION

(57) Abstract: A radiation curable waterborne composition is disclosed. Said composition comprises at least one amphiphilic dendritic polymer, at least one non-amphiphilic radiation curable oligomer or polymer, water and optionally at least one initiator initiating and/or promoting radiation curing. Said at least one amphiphilic dendritic polymer is built up from a polyhydric dendritic core polymer having terminal hydroxyl groups and at least one carboxylic acid and at least one adduct, obtainable by addition of a monoalkylated polyethylene glycol to a dicarboxylic acid or anhydride, each bonded to at least one terminal hydroxyl group in said polyhydric dendritic core polymer.